

Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER
PO038537

Supplier: MOA001-VU
Monroe Aerospace
399 East Drive
Melbourne, FL 32904 USA
Phone: 1-321-727-0047
Fax: 1-321-727-7331

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No:	PO038537
PO Date:	12/1/17
Due Date:	12/6/17
Purchase Order	
Revision:	
Revision Date:	
Ship-To Contact:	Baker, DianePhone: dbaker@dartaero.com
Via:	Ground
Pymt Terms:	Net 30
Freight Terms:	
Special Comments:	

Items										
Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
5	AN43B-7A		Eyebolt	Partial	12/6/17	20 Ea	9 Ea	11 Ea	\$5.25/Ea	\$57.75
									Grand Total:	\$57.75

Order Notes

Procurement Quality Clauses
A005 RIGHT OF ENTRY
A016 PERSONNEL QUALIFICATION
A026 CERTIFICATION OF MATERIAL CONFORMANCE
A032 PUBLIC LAW 101-592 FASTENER QUALITY ACT
A033 STATEMENT OF CONFORMITY/TEST RECORDS FOR NAS, AN and MS FASTENERS
A040 NOTIFICATION OF QUALITY ESCAPE
A041 QUALITY MANAGEMENT SYSTEM
A042 DART NOTIFICATION BY SUPPLIER
A043 RETENTION OF QUALITY DOCUMENTS

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 2/13/18 8:20 AM dart.baker.diane



CERTIFICATE OF CONFORMITY

NO: 625848

BILL TO:

DART AEROSPACE LTD.
ACCTS. PAYABLE
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7

SHIP TO:

DART AEROSPACE LTD.
ATTN: RECEIVING
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7

CUSTOMER PO	SHIP DATE	AIRWAY BILL/TRACKING #
PO038537	1/26/2018	1Z3165E06855942472

PART NO:	Description	CND	QTY	S/L	
AN43B7A REV: 2	EYE BOLT Customer Reference:	NE	11	9	LOT: 43993.07 MFR: OBM

CONDITIONS: NE - New OH-OVERHAULED RP-REPAIRED SV-SERVICEABLE

We hereby certify that the items that are a part of this Purchase Order have been visually & dimensionally found to conform to all applicable standards, drawings & specifications. The liability of ECAS, LLC is limited to replacement of any item which is rejected because of a defect in material or workmanship if notified within 30 days & liability shall not exceed the invoice value. Such replacement shall constitute satisfaction of all liability.

SIGNED: _____

For and on behalf of ECAS, LLC dba MONROE AEROSPACE

ECAS, LLC dba MONROE AEROSPACE
399 EAST DRIVE MELBOURNE, FL 32904 PH: 800.330.3975

OBM Inc.

2455 S Leonine Rd
Wichita, KS 67217

Phone 316-522-8145 Fax 316-522-8817

SOLD TO
MONROE AEROSPACE 399 East Drive Melbourne, FL 32904

SHIP TO
ECAS LLC. MONROE AEROSPACE 399 East Drive Melbourne, FL 32904

DATE	SHIP	VIA	P.O. NUMBER	F.O.B.	TERMS	INVOICE #
12/14/2017	12/14/2017	UPS	FL81389	Wichita	1% 10, NET 30 ...	45463

LINE	QUANT.	PART NUMBER	DESCRIPTION	U/M	LOT NO.	PRICE E...	AMOUNT
1	50	AN43B-7A	EYEBOLT, REV. 2		43993.07		

WE CERTIFY THAT THE RAW MATERIAL USED ON THE ABOVE PURCHASE ORDER MEETS THE REQUIREMENTS OF THE DRAWING. TEST REPORTS PERTAINING TO RAW MATERIAL, HEAT TREATING, AND PLATING ARE ON FILE. COUNTRY OF ORIGIN USA. PAUL OTT, QUALITY

D. N. S. M. H.

MAC FASTENERS, INC.
1110 ENTERPRISE
OTTAWA, KANSAS 66067

**CERTIFICATE OF CONFORMANCE
AND
MANUFACTURER'S AFFIDAVIT**

CUSTOMER BILD INDUSTRIES

PO: 91474

PART NUMBER: MS24694S54

REV: 2

LOT NUMBER: 89417

MANUFACTURED QUANTITY: 60,000

MILL HEAT NUMBER: MM16103779

COUNTRY OF ORIGIN: UNITED STATES OF AMERICA

DFARS 252.225.7009 Compliant

MERCURY FREE CERTIFICATION

MacFasteners certifies that the parts referenced in the above lot number
do not contain Mercury or Mercury compounds, and were
manufactured in a Mercury free environment.

We certify that the parts furnished against the above referenced purchase order were manufactured by MAC
FASTENERS within the United States, and were processed in accordance with all applicable drawings and
specifications. Objective evidence of compliance is on file, subject to examination upon request.

Mac Fasteners is a DISC QSLM approved Manufacturer - CAGE Code 0RFT4
Mac Fasteners is an Airbus approved Supplier - 203399

DATE: 04/29/17


QUALITY ASSURANCE REPRESENTATIVE

Mac Fasteners
A TriMas Aerospace Company
1110 E. Enterprise
Ottawa, KS 66067

TEST REPORT AND PROCESS CERTIFICATION

CUSTOMER BILD INDUSTRIES		PO NUMBER 91474	PO Date 12/08/16	CERT DATE 04/29/17
PART NUMBER MS24694S54	REV 2	PART TYPE Screw, 100° Flat Head, Cruciform Recess		
LOT NO 89417	MFG QUANTITY 60,000	PROCUREMENT SPEC NASM7839 REV 1		

RAW MATERIAL IDENTIFICATION (Mill Cert Attached)

MATERIAL / MATERIAL SPECIFICATION 8740 PER AMS6322	MILL HEAT NUMBER MM16103779	SUPPLIER JOHNSTOWN
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MECHANICAL TEST RESULTS - TESTING PER NASM1312

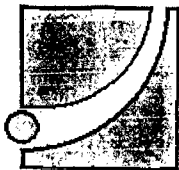
ULTIMATE TENSILE STRENGTH POUNDS / PSI	DOUBLE SHEAR STRENGTH POUNDS / PSI	Fatigue Test Sample <input type="checkbox"/> Accept
3,120 3,100	NOT REQUIRED	NOT REQUIRED
3,130 3,130		Stress Durability <input type="checkbox"/> Accept
3,100 3,090		External Load Method
3,090 3,050		Load Hours
3,070 3,080		Magnetic Particle Inspection per ASTM E1444
3,120		Sample Insp <input type="checkbox"/> 100% insp <input type="checkbox"/> Accept
3,080		Liquid Penetrant Inspection per ASTM E1417
3,110	Sample Insp <input type="checkbox"/> 100% insp <input type="checkbox"/> Accept	
MIN. REQ. 2500	MIN. REQ.	Magnetic Permeability ASTM A342 Less than 2.0 <input type="checkbox"/> Accept
METALLURGICAL EXAMINATION		Head Marking <input checked="" type="checkbox"/> Accept
Discontinuities <input checked="" type="checkbox"/>	Carb/Decarb <input checked="" type="checkbox"/>	Recess Torque in/lbs <input type="checkbox"/> Accept
Grain Flow <input checked="" type="checkbox"/>	Microstructure <input checked="" type="checkbox"/>	
Grain Size <input checked="" type="checkbox"/>	Workmanship <input checked="" type="checkbox"/>	
Thread Inspection System 21 <input type="checkbox"/> System 22 <input checked="" type="checkbox"/> System 23 <input type="checkbox"/> FED-STD-H28/20 - ASME B1.3		

FINISH / PROCESSOR: Detray Plating Works		HEAT TREAT PROCESSOR: Paulo Products NADCAP ID 4679	
Cadmium Plate <input checked="" type="checkbox"/>	AMS-QQ-P-416 E	Type II Class 3	SPECIFICATION: AMS2759
Passivate <input type="checkbox"/>			REQUIREMENT: 125-145 KSI FTU HRC 26-32
			RESULTS: SAMPLE SIZE: 13 28 - 31 HRC

TEST CERTIFICATION

WE CERTIFY THAT THE PART NUMBER, LOT NUMBER, AND SAMPLES REFERENCED ABOVE HAVE BEEN PROCESSED AND TESTED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATION FOR THE TESTS REPORTED HEREIN. THIS CERTIFICATION SHALL NOT BE RE-PRODUCED, EXCEPT IN FULL, WITHOUT THE APPROVAL OF MAC FASTENERS, INC.

Jim Farrell
Quality Assurance Representative



Johnstown Wire Technologies

124 Laurel Ave,
Johnstown, PA 15906

Phone: 814 532-5756
Fax: 814 532-5684

TEST REPORT

WORK ORDER
579270

LOT NUMBER
E-MM16103779
SALES ORDER / RLS
096578 / 001

CERT ID / REV
00052614 / 01

SOLD TO

Mac Fasteners, Inc.
Best Way Distribution
13209 Arrington Rd. Docks 17-20
Grandview, MO 64030
USA



CUSTOMER P.O. P000002247	CUSTOMER PART 8740-.1865	QUANTITY 19,731 LBS	COILS 10	LADING NO 00142737	SHIPMENT DATE 01/06/2017
SPECIFICATION MacFast-87186 AMS2301; AMS6322; AMS-S-6049A; MIL-S-6049A 8740 DFARS Defense Federal Acquisition Regulation Supplement Silicon Killed Fine Grain Aircraft Quality/Cold Heading Quality Drawn From Annealed Rod Spheroidize Annealed In Process Heavy Phos & Light Lube Ctd Size: .1865 +.001 -.000					
CERTIFICATION REQUIREMENTS					
Chemical					
C .39	Mn .82	P .009	S .005	Si .23	Al .026
Ni .40	Cr .45	Mo .202	Cu .14	V .0016	
Co ???????	Ti ???????	N .0052	Sn .004		
Physical					
J1 56	J10 40	J11 38	J12 36	J2 56	J3 56
J5 50	J4 53	J6 47	J7 45	J8 43	J9 41
Mechanical					
TEST	UNITS	HIGH	LOW	AVERAGE	
Tensile Str	Lbs/SqIn	84000	82000	83000	
RA Per Cent	Percent	75.8	73.2	74.7	
Decarb FFD	Inches	.000	.000	0.000	
Surface def. depth	Inches	.0015	.0015	0.0015	
Rod / Melt Source					
Rod Source Nucor	Melt Source Nucor	Country of Origin USA	Nafta Yes		
End of Certification					

I certify that the results are a true and correct copy of the records prepared and maintained by JOHNSTOWN WIRE TECHNOLOGIES in compliance with the requirements of the cited specification. Chemistry is as reported by the rod / bar supplier and is not in JWT A2LA accreditation. This test report cannot be reproduced or distributed except in full without the written permission of JOHNSTOWN WIRE TECHNOLOGIES. The test results certified herein relate only to the items tested.

Daniel J. Malik
Daniel J. Malik Director of Quality Assurance

NUCOR**NUCOR CORPORATION
NUCOR STEEL SOUTH CAROLINA****Mill Certification**

1/5/2017

300 Steel Mill Road
DARLINGTON, SC 29540
(843) 393-5841
Fax: (843) 395-8701Sold To: JOHNSTOWN WIRE TECHNOLOGY
124 LAUREL AVE
JOHNSTOWN, PA 15906
(814) 532-5600
Fax: (814) 532-5613Ship To: JOHNSTOWN WIRE TECHNOLOGY
124 LAUREL AVE
JOHNSTOWN, PA 15906
(814) 532-5600
Fax: (814) 532-5613

Customer P.O.	91254	Sales Order	252774.1
Product Group	Rod	Part Number	32000312000DU1A
Grade	8740 MIL-S-6049 ASMS 6322	Lot #	DL1690001696
Size	5/16" (.3125) Wire Rod	Heat #	MM16103779
Product	5/16" (.3125) Wire Rod Coil 8740AQ	B.L. Number	C1-706032
Description	8740AQ	Load Number	C1-385310
Customer Spec		Customer Part #	FXT40AA-5/16

I hereby certify that the material described herein has been manufactured in accordance with the specifications and standards listed above and that it satisfies those requirements.

Roll Date: 11/8/2016 Melt Date: 10/25/2016 Qty Shipped LBS: 32,192 Qty Shipped Pcs: 8

Melt Date: 10/25/2016

C	Mn	P	S	Si	Cu	Ni	Cr	Mo	V	Al	Sn
0.39%	0.82%	0.009%	0.005%	0.23%	0.14%	0.40%	0.45%	0.202%	0.0016%	0.026%	0.004%
N	H										
0.0052%	2 ppm										

Actual Hardenability Band

J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11	J12	J13	J14	J15	J16	J18	J20	J22	J24	J26	J28	J30	J32
56	56	56	53	50	47	45	43	41	40	38	36	35	34	33	32	31	30	29	28	28	27	26	26

Roll Date: 11/8/2016

Microexamination OK

AMS 2301 Frequency: 0.00

AMS 2301 Severity: 0.00

Min Tensile 124000psi

Max Tensile 134000psi

Average Tensile 128000psi

Reduction of Area: 59%

Grain Size per ASTM E112 = 9

Reduction Ratio 466.50 :1

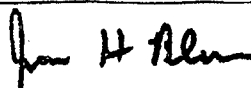
ASTM E381

Surface: 1 Mid Radius: 1 Center: 1

ASTM E45 Method A (Worst)

Sulfides: T: 1.0 H: 1.0 Alumina: T: 0.0 H: 0.0 Silicates: T: 0.0 H: 0.0 Globular: T: 0.5 H: 0.5

1. WELDING OR WELD REPAIR WAS NOT PERFORMED ON THIS MATERIAL
2. MELTED AND MANUFACTURED IN THE USA
3. MERCURY, RADIUM, OR ALPHA SOURCE MATERIALS IN ANY FORM HAVE NOT BEEN USED IN THE PRODUCTION OF THIS MATERIAL

James H. Blew
Division Metallurgist

DE TRAY Plating Works

Specialized Electro-Plating and Polishing
Nickel
Copper
Decorative Chrome
Satin Chrome
Zinc
Cadmium
Passivate
Bright Dip
Strip Copper
Descale

10405 EAST ELEVENTH STREET • INDEPENDENCE, MISSOURI 64052
Phone (816) 252-8411 Fax (816) 252-8527 • E-mail: DeTrayPlating@Aol.com

April 28, 2017

Mac Fasteners
1110 East Enterprise Street
Ottawa, Kansas 66067

Subject: Certification

This is to certify that the following parts have been cadmium plated QQ-P-416/AMS-QQ-P-416/NAS4160/AMS2400, Type II, Class 3. Please reference our Invoice# 211241 dated 4/28/17 for:

Lot# 89417

P.N.- MS24694S54

James T. Pierson, Vice-President



DE TRAY PLATING WORKS

Please Visit our Web Site : DeTrayPlating.com



CUST PO NO
FL01112
SO NO
559969
FROM:
BILD INDUSTRIES, INC. 800 CLEARWATER LOOP
POST FALLS, ID 83854



CUST PO NO
FL01112
SO NO
559969
FROM:
BILD INDUSTRIES, INC. 800 CLEARWATER LOOP
POST FALLS, ID 83854



CUST PO NO
FL01112
SO NO
559969
FROM:
BILD INDUSTRIES, INC. 800 CLEARWATER LOOP
POST FALLS, ID 83854

MONROE AEROSPACE DBA ECAS, LLC
399 EAST DRIVE
MELBOURNE FL 32904

SHIP TO

MONROE AEROSPACE DBA ECAS, LLC
399 EAST DRIVE
MELBOURNE FL 32904

SHIP TO

MONROE AEROSPACE DBA ECAS, LLC
399 EAST DRIVE
MELBOURNE FL 32904

CUSTOMER BILL TO ADDRESS

COMPLETE CUSTOMER PO NO.

BILL TO NO.

SHIP TO NO.

PAGE

FL01112

ECA001

3

BUYER NAME & PHONE NO.

EMAIL

MONROE AEROSPACE DBA ECAS, LLC
399 EAST DRIVE
MELBOURNE FL 32904

PACKING SLIP
INSPECT IMMEDIATELY

NE	LOC	QTY ORDERED	TOTAL QTY SHIPPED THIS ORDER	LOT	CUST. PO NO.	CUST. NO.	DESCRIPTION
		150	150	86184 117307 ANG-27A ACCEPTED	FL01112	ECA001	BOLT BX23
NE	LOC	QTY ORDERED	TOTAL QTY SHIPPED THIS ORDER	LOT	CUST. PO NO.	CUST. NO.	DESCRIPTION
		1	1	MAC FULL CERTS	FL01112	ECA001	CERTIFICATION
NE	LOC	QTY ORDERED	TOTAL QTY SHIPPED THIS ORDER	LOT	CUST. PO NO.	CUST. NO.	DESCRIPTION
		8500	8500	91474 89417 MS2469455 ACCEPTED	FL01112	ECA001	SCREW BX24-25
NE	LOC	QTY ORDERED	TOTAL QTY SHIPPED THIS ORDER	LOT	CUST. PO NO.	CUST. NO.	DESCRIPTION
		1	1	MAC FULL CERTS	FL01112	ECA001	CERTIFICATION
NE	LOC	QTY ORDERED	TOTAL QTY SHIPPED THIS ORDER	LOT	CUST. PO NO.	CUST. NO.	DESCRIPTION
		1000	1000	92824 65646 MS51957-13 ACCEPTED	FL01112	ECA001	SCREW BX22
NE	LOC	QTY ORDERED	TOTAL QTY SHIPPED THIS ORDER	LOT	CUST. PO NO.	CUST. NO.	DESCRIPTION
		1	1	NEFLO FULL CERTS	FL01112	ECA001	CERTIFICATION
NE	LOC	QTY ORDERED	TOTAL QTY SHIPPED THIS ORDER	LOT	CUST. PO NO.	CUST. NO.	DESCRIPTION
		1200	1200	93420 94997 MS24694047 ACCEPTED	FL01112	ECA001	SCREW BX23
NE	LOC	QTY ORDERED	TOTAL QTY SHIPPED THIS ORDER	LOT	CUST. PO NO.	CUST. NO.	DESCRIPTION
		1	1	DRESCEN FULL CERTS	FL01112	ECA001	CERTIFICATION

Thank you for your order

CERTIFICATION OF CONFORMANCE

DATE

QUALITY CONTROL MANAGER

WE HEREBY CERTIFY THAT THE MERCHANDISE INCLUDED ON THIS PACKING LIST IS IN CONFORMANCE WITH AN-MS-NAS OR APPLICABLE SPECIFICATIONS AND OR DRAWINGS.

CAGE CODE 31222

DEC 11 2017

Paula K. Spencer

TOTAL WT

NO CTNS

P = PARTIAL
C = COMPLETE
CC = CONSIDER COMPLETE
CX = CANCEL

DATE SHIPPED

SHIPPED VIA

SIGNATURE - MERCHANDISE RECEIVED

X